

**CAPACITY MANAGEMENT AND PERFORMANCE OF
FIVE- STAR HOTELS IN NAIROBI COUNTY; KENYA**

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DECLARATION

This research project is my original work and has not been submitted for any award in this or any other University.

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This research project was submitted for examination with my approval as the university supervisor.

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DEDICATION

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TABLE OF CONTENTS

DECLARATION	
ACKNOWLEDGEMENTS	
DEDICATION	
TABLE OF CONTENTS	
LIST OF TABLES	
LIST OF FIGURES	
LIST OF ACCRONYMS	
ABSTRACT	
CHAPTER ONE: INTRODUCTION	
1.1 Background of the Study.....	
1.1.1 Capacity Management.....	
1.1.2 Performance.....	
1.1.3 Hotel Industry in Kenya.....	
1.2 Research Problem.....	
1.3 Research Objectives.....	
1.4 Value of the Study.....	
CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction.....	
2.2 Theoretical Foundation.....	
2.2.1 Resource Based Theory.....	
2.2.2 Theory of Capability.....	
2.3 Capacity Management.....	
2.3.1 Demand Strategies.....	
2.3.1.3 Demand Forecasting.....	
2.4 Supply Strategies.....	
2.4.1 Part-Time Employees.....	
2.4.2 Sharing Capacity.....	

2.4.3 Expansion Ante.....	
2.5 Capacity Management and Performance.....	
2.6 Conceptual Framework.....	
CHAPTER THREE: RESEARCH METHODOLOGY.....	
3.1 Introduction.....	
3.2 Research Design.....	
3.3 Population of the Study.....	
3.4 Data Collection Instruments.....	
3.5 Data Analysis and Presentation.....	
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION.....	
4.1 Introduction.....	
4.2 Response Rate.....	
4.3 Background Information.....	
4.3.1 Period Worked.....	
4.3.2 Respondents Job Position.....	
4.3.3 Department Worked.....	
4.3.4 Extent of Adoption of Capacity Management Strategies.....	
4.4 Capacity Management Strategies.....	
4.4.1 Demand Strategies.....	
4.4.2 Supply Strategies.....	
4.5 Challenges affecting Implementation of Demand and Supply Strategies.....	
4.6 Performance.....	
4.7 Relationship between Capacity Management Strategies and Performance of the Five-Star Hotels.....	
4.7.1 Model Summary.....	
4.7.2 ANOVA.....	
4.7.3 Coefficients.....	

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS.....

5.1 Introduction.....

5.2 Summary of Findings.....

5.3 Conclusions.....

5.4 Recommendations.....

5.5 Limitation of the Study.....

5.6 Suggestions for Further Research.....

REFERENCES.....

APPENDICES.....

Appendix I: Research Questionnaire.....

Appendix II: List of Five- star Hotels in Nairobi County.....

LIST OF TABLES

Table 4.1: Response Rate.....	24
Table 4.2: Period Worked.....	25
Table 4.3: Department Worked.....	26
Table 4.4: Demand Strategies.....	28
Table 4.5: Supply Strategies.....	30
Table 4.6: Challenges affecting Implementation of Demand and Supply Strategies.....	32
Table 4.7: Performance.....	33
Table 4.8: Model Summary.....	34
Table 4.9: ANOVA.....	34
Table 4.10: Coefficients.....	35

LIST OF FIGURES

Figure 2.1: Conceptual Framework.....	
Figure 4.1: Respondents Job Position.....	
Figure 4.2: Adoption of Capacity Management Strategies.....	

LIST OF ACCRONYMS

CF	-	Capacity Forecasting
CM	-	Capacity Management
CO	-	Capacity Out Sourcing
IM	-	Inventory Management
JIT	-	Just In Time
KBS	-	Kenya Bureau of Statistics
KTDC	-	Kenya Tourist Development Corporation
PI	-	Price Management
TOC	-	Theory of Constraint
TRA	-	Tourism Regulatory Authority
UNCTA	-	United Nations Conference on Trade and Development
D		

ABSTRACT

This study aimed to establish the influence of capacity management strategies on performance of five-star hotels in Nairobi County. The study also sought to evaluate the challenges experienced in incorporation of capacity management strategies and its impact on performance of five-star hotels. The study undertook a census of all 32 five-star hotels within Nairobi County; Kenya. The study involved a sample of 96 participants drawn from the strata management structures of the respective five- star hotels within the Nairobi County. Primary data were used which were collected through questionnaires from the top-level, middle line and lower level managers. The study used descriptive statistical tools and the regression model to analyze the collected data. The study found that various implementation of demand and supply strategies by five- star hotels was affected by several challenge among them information technology infrastructure, high costs of operations and seasonality based demand. The study also documented that ICT plays a key role in enhancing capacity management as well as the performance of five- star hotels. The regression results found that price management showed a positive and significant relationship with performance while demand forecasting reflected positive and significant relationship with performance. Further, the results showed that the relationship between outsourcing and creating reservation systems and performance was positive and significant while there was a positive but insignificant relationship between the use of part-time employees and performance. Additionally, capacity sharing had a significant positive effect on performance whilst expansion ante had a positive and insignificant relationship with the performance of five-star hotels in Nairobi. The research concluded that price management, demand forecasting, outsourcing and creating reservation systems and capacity sharing had a statistically significant and positive effect on performance of five- star hotels in Nairobi County.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

According to Battistoni et al., (2013), capacity management is a process of balancing cost against the resources needed and it involved balancing forces of supply and demand simultaneously. Whereas entity performance is viewed in terms of efficiency and efficacy, relevance and financial productivity. Effectiveness often denotes an organizations ability to attain its objective while efficiency explicates the degree to which cost are minimized. Relevance is the extent to which output and its stakeholders value results; while financial sustainability is achieved through effective acquisitions and development of financial, human and physical resources (Lusthaus et al, 2015).

The rationale of the study was underpinned by the theory of capability and resource based theory hypothesis. Capability model identifies the tenets that provide road map on viable competitive advantage. On this basis, providing resources, and not just resources, is an effective driver for sustainable competitiveness through performance (Vorhies et al., 2009). The RBV establishes that organizations are handled through the resources it holds. This theory sees organizations from a perspective a firm possess in terms of resources and capabilities and the value they generate in a sustainable way. The resources and capabilities are seen as the inputs and the team to coordinate the transformation respectively (Barney, 2010). Hotels attain competitive positioning when a sizeable number of arrivals prefers their products over those offered by the rivals. Businesses attain competitive positioning when reasonable performance is achieved (Sabah, Laith, & Manar, 2012).

The Resource Based Theory provides that it is easier to achieve competitive advantage in a given niche using the available resources by properly aligning those valuable and unique resources towards a particular aspect. While the theory of capability stipulates that the foundation of various capabilities lies in the different techniques and accumulated knowledge applied via organizations procedures that enable an entity to normalize practices and maximize assets utilization. The origin of some capabilities is therefore the different techniques and knowledge of employees of the organization, as well as the

expertise of these employees. Njuguna (2009) notes that human resource management as a strategy for capacity management aids enterprises achieve good performance.

Therefore, in the business environment, capacity management is associated with serious difficulties, especially when the demand for goods and services is unpredictable, and therefore there are problems with capacity management planning, which have a long-term influence of usage of entity assets and subsequently on productivity (Alp & Tan, 2006). Due to the development of information technology, the need to meet organizational goals and increase efficiency and effectiveness, increasing capacity is very important while reducing operating costs. Not only do customers need more care today, but they also need to be treated as business partners and therefore need to increase capacity to be satisfied and the price paid for goods and services is equal to the value of money (Bradley, 2000).

Kanorio (2014) explored how quality management affected Kenyan banking sector operational performance and documented that quality management systems adoption increases the bank's profitability, turnover, competitiveness, increases the market share, improves services provision, ensures effective detection of operational waste, improves operational efficiency and thus reduce operating costs. In her findings, Wanjiku (2015) established that mobile communications companies and other industrial companies that use operational management strategies post higher performance in their corresponding sectors.

The study centered on five- star rated hotels located within the County of Nairobi, Kenya. In spite of the top-notch amenities in Kenyan restaurants and hotels, resources competition is still high. Kamau (2008) highlighted that hospitality sector which hotels falls has been facing numerous challenges posing threat to their existence. The most common threat noted is that some tourist prefers other destination South Africa, Tunisia and morocco to Kenya and as a result some hotels are rendered with liquidation problems and others going bankrupt. In addition, demand for restaurant services is usually seasonal, which means that staff and facilities are underutilized in low seasons (Mzera, 2012).

1.1.1 Capacity Management

Alp and Tan, (2006) viewed capacity management as propensity of a service or production resource like a department, factory, equipment or procedure to operate for a period of time. Alp and Tan (2009) also indicated that service capability remains the largest volume of production that can be achieved at a given time and at a given level of machinery, staffs and equipment. Service firms' performance or failure to manage product quality and control assets regarding resources productivity is contingent on its employees monitoring the ability to meet demand (Armistead & Clark, 2004). While Armistead and Clark, (2012) viewed capacity management to involve analysis, optimization and planning of prospects to meet the demands at a lower cost and efficiently. They further noted that capacity management is a process with wider spectrum of dimensions that capacity requirement to ensure maximum resources utilization to achieve required performance levels.

Capacity management focuses on adjusting capacity of an operating system as well as the requirements imposed on this system. It entails making decisions in optimizing, exploring and planning capability to meet demands at reasonable cost and in a timely manner (Mieghem, 2013). An organizations capacity is defined as its potential to perform its core activities while successfully applying its capabilities and its rare resources to attain its goals and satisfy shareholders' expectation. (Ker, 2003). Further noted that organizations capacity includes resources, knowledge and processes employed in attaining its core objectives. Heskett (2000) also opined that total capacity of any organization comprises of physical infrastructure, staffing, leadership, technology, financial resources, programs and process management and linkages to other organization amongst many other aspects. In contrast, if a company adopted a plan to take advantage of excessive demand through persistently functioning at optimum or almost complete capability, it may be vulnerable to the persistent threat of deteriorating service quality (Jacobs & Chase 2012).

1.1.2 Performance

Firm performance is determined against a standard or prescribe key performance indicators which may include but limited to proficiency, value and environmental obligation like supervisory compliance, cost reduction and waste reduction (Stevenson,

2014). Further noted that avenues of increasing operational performance include but not limited to the following; output tracking, incentives programmes and planned standards performance amongst others. Such may include basically business units alignment in a firm to make sure they work to attain the set objectives. Zhu and Sarkis, (2004), noted that the company have responsibility to customers, suppliers and general public to influence the flexibility of goods and service being produce while also giving new products mix to customers.

Operational performance excellence is achieving when cost element of production is maintained at its lowest while trying to influence the speed of production and delivery of goods (Mwangi, 2013).

Traditionally hotel industries usage of financial controls is recognized to play a key part, and how non-financial controls among them quality of the product, customer satisfaction and employee development besides productivity are crucial in determining a company's competitiveness and its ability to maintain future profitability (Wangui, 2013). Further noted that the integration of nonfinancial proxies in measurement of performance plays a key role during tough competition, shorter product life cycles and the ever-changing technological advances that characterize today's business.

According to Kotler and Armstrong, (2008) hotels rated high for excellence in their performance when it comes to providing superior amenities and financial strength with emphasis on quality and meeting the expectations of their customers. They added that prosperous entities have detailed and quality plans with outstanding objectives and definite implementation methods.

1.1.3 Hotel Industry in Kenya

Hotels and restaurants across the globe are categorized centered on diverse systems of classification. The star classification systems of hotels being commonly used in different states. Hotels in Kenya with star rating includes but not limited to 1-star, 2-star, 3-star, 4-star as well as 5-star hotels and the higher the rating more luxury it provides to its customer base. The organization in charge determining the condition of the hotels have responsibility of classification, (Johanna, 2010). In the recent Michelin award is now

commonly associated with chefs and restaurants and was once using star rating classification where tourist and travelers depended on. (<https://touristmeettravelers.com>)

Every single country has its particular indicator they use for hotel categorization besides those bodies recognized. The facilities and services offered by hotels plays a critical role in classification. Kenya hotel sector in the recent past eyes to benefit from promising tourism industry (KTB, 2014). The figure of good Kenyan hotels is around 500 with their numbers growing daily (KTB, 2010).

In their study, McClanahan, Muthiga and Mwanguni (2015) documented that the Kenyan hospitality industry accounted for 14% of the country's GDP with 12% of aggregate employment, and the industry is expected to grow by 3.7% a year in the next 10 years. Class, atmosphere, flair and high services quality are the main characteristics of Kenyan hotels. However, competitive is very strive in the Kenyan hotel industry (<http://www.kenya space.com/hotels>). As such, in spite of great quality and well-equipped hotels within Kenya, resources competition and market shares is growing in the hotel sector in Nairobi. Ayele (2012) posit that enterprises in the hospitality sector are more market competitive and require skilled workers within the industry and in the marketplace. Customer preferences and expectations also increase periodically.

Kenyan hotels stand classified by the Hotels and Restaurants authority on the basis of established standards. The most recent classification of Kenyan restaurants and hotels was in 2012. Hotels within Kenya are categorized into 5 categories, referred to as stars alternating from one-star to five- star s. The five-star hotel can be described as a luxury hotel which provides extraordinary accommodation and other facilities that are likely to suit those interested in a holiday and vacation. In order for a hotel to be rated five- star, exceptional service quality is expected. They offer quality service in terms of day and night cleaning, information for guests and discounts on local attractions. Parking services, a fitness center and a health center are required for the hotel facilities of the five-star hotel. The whole building is completely detached and the place meets high global standards. A number of 5-star rated hotels offer additional services including a lounge, night club and a casino. Room equipment must be furnished and decorated in exceptionally high quality with high caliber employees. Such a hotel must also have a

high staff to guest ratio. There are ten five-star hotels within Nairobi County. In 2017, the tourism sector contributed 9% to the world economic growth (GDP) and funded more than 255 million jobs (World Council for Travel and Tourism, 2017).

1.2 Research Problem

Operational capacity management in a given sector of economy leads to improved performance while enhancing operational sustainability of any firm in any given industry and maintaining good relationship with interested groups. Uncertainty in demand and lack of requisite resources are the major sources of capacity management and service quality problems in given environment (Slack, 2012). Operation managers involved in the management are bound to succeed or fail by juggling on the available resources to obtain the right combination that yield optimum utilization of the available resources and thereby, maximizing the output and therefore emphasis is placed on the factors of production within the organization that influences performance (Bitner & Zeithamal, 2003).

Several scholars have carried out research on capacity management. Internationally, Betts, Walley and Meadows (2000) explored how capacity management, tasks scheduling, forecasting affected US banking centers and documented that short-term deviations were not met within time and that the period apportioned to clients was insufficient. Further, Adenzo, Garcia and Tore (2000) undertook a research on how capacity management affected the service sector and documented that personalized requirements and unclear demand made it challenging to assign and plan productive capacity. Further, Battistoni (2013) conducted a study on SMEs in Italy in which he found that operational management strategies positively impacted company's productivity and it was positively related to production and SCM so as to undertake best practices that have an impact on profits, internal efficiency and cost reduction. Additionally, he documented that the entity size did not play a role in the implementation of operational management procedures.

Locally, Ochieng (2015) carried out research study on capacity management and performance of service industry focusing on the Sunset hotel in Kisumu and found out

that inventory management, price management besides outsourcing practices affects performance. In his study the researcher did not exhaustively demonstrated the relationship between technology, expansion ante and use of part staff and performance of five- star hotels. Further, Ong'ondo (2013) examined how Safaricom strategies on capacity management affects its services quality. The author focused on extent to which strategies for capacity management strategies were adopted, the determinants of strategies of capacity management implementation. The findings indicated that the implementation of Safaricom Limited's capacity management strategies in its retail channels has improved services quality by the entity. Oyedijo (2012) explore the strategic speed and competitiveness of the Nigerian telecommunications industry. The results documented a fundamental link between strategic dexterity and competitiveness. He also found that companies that are flexible and speedy outperform companies with poor tactical agility.

Arising from the previous studies done by other researchers, few of them have exhaustively captured the role of capacity management Strategies and performance of five-star hotels specifically in Nairobi. Given such circumstances prevailing within the industry, this research seeks to explore how capacity management strategies influences five-star hotels performance in Nairobi County. The paper sought to answer the following questions; what are the influence of supply strategies on performance of 5 star rated hotels with the County of Nairobi? How do demand strategies influence the performance of five-star rated hotels, what are the challenges experienced in execution of capacity management strategies in Nairobi County?

1.3 Research Objectives

The study's general aim objective was to establish the influence of capacity management strategies on performance of five-star hotels in Nairobi County

The specific research objectives were:

- i. To determine the influence of demand strategies on performance of five-star hotels in Nairobi County

- ii. To determine the influence of supply strategies on performance of five- star hotels in Nairobi County
- iii. To establish the challenges experienced in the implementation of capacity management strategies among five-star hotels in Nairobi County

1.4 Value of the Study

The study outcomes will help hotel executives to ascertain actual and resourceful operations management practices to use the unused resources and performance issues in the country's hotel industry.

For policy-makers, the study's recommendations shall be used as a reference for future policy measures entailing capacity management and hotel sustainability and performance

The research results will expand the body of existing knowledge in operations management and prospective researchers may utilize the study findings as a reference point.

The current and future investors shall use the results of the study to develop informed decision on the operation management practices best suited for operations in hotels. The reason is that investors at all times desire to spend their cash where they can achieve value while decreasing costs of production.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Chapter 2 of this project presents an appraisal of the earlier studies and past materials on capacity management practices, conceptual framework and empirical studies and focuses on study's theoretical background that includes theory of capability and resource based theory.

2.2 Theoretical Foundation

This segment entails assessment of theories guiding the paper including theory of capability and resource based theory.

2.2.1 Resource Based Theory

Role of ICT in improving organization performance and sustainability is best explaining by resource-based (RBV) view hypothesis. The model views the firms as linkage of capabilities and resources which are rare and scarce and besides providing that an entity provides additional advantage via tactical expansion of organization's rare, difficult to copy and difficult to substitute resources like ICT. David (2009) indicates that the RBV provides that a company can be successful by combining its distinctive assets to manage all segments of entity as needed. ICT is one of the most valuable resources that can be used to improve business performance (Cagna, 2007).

The agility at which organization adopt information technology as portfolio of key assets and performance drivers in the present age. The unpredictability of hospitality sector requires improvement of environmental features that reconfigure external and internal, create and integrate resources (Raisinghani, 2005). The RBV provides a linkage pattern between organization internal capabilities to strategy formulation towards performance improvement, (Ochieng, 2006). The theory provides the basis for the study since it underpins the necessity of hotels investing and developing unique resources such as ICT which finally improves hotel performance, (Wang & Ahmed, 2007).

In the RBV, a distinction is made between different resources categories in the narrower sense, such as human capital, physical capital, financial resources, firm capital resources,

company technology, reputation, information resources comprising the organization culture as a management team (Penrose, 2015).

Human resource capital development includes but not limited to training, experienced, intelligence and relationship management while organizational capital includes channels of information exchange between different strategic units in an organization. Reputation and culture are two resources concern with corporate activities beyond organizational boundaries. These resources do not have strategic value per se, but if used efficiently and effectively, they can provide strategic value and thus enhance performance (Barney, 2012).

2.2.2 Theory of Capability

The capability theory states that resources usage, not just resources possession, serves as an effective performance driver (Vorhiesetal, 2009). The model indicates that entities are designed with their professional and human resource skills in mind. Demsetz (2009) describes an organization's capabilities as a comprehensive set of techniques that its employees use to synchronize tasks and capitalize on resource utilization. Multiple skills of an entity's employees are based on the collective and aggregate employees' expertise and knowledge (Donegan and Murray, 2003). Human resource administration as a strategy of managing capacity aids companies achieve viable performance (Njuguna, 2009). Hotels just like other enterprises face lots of competitive issues due to complexity and dynamism of the business environs. This has led hotel professionals to encourage their employees to constantly about the latest and most innovative practices of capacity management (DeNisi 2008).

2.3 Capacity Management

The section entails capacity management strategies use to enhance performance of five-star hotels. Such strategies include but not limited to the following demand approach strategies and demand approach strategies.

2.3.1 Demand Strategies

Demand strategies involved different ways of capacity management. Capacity may be managed in several ways, comprising capacity expansion and adaptive capacity. Expandable capacity means that a certain capacity is elastic and more people can be served with the same capacity by congestion (e.g. in the subway), lengthening operational hours or speeding up the customer's turnaround time (William, 2012). Capacity adjusting includes adapting more to demand through short-term downtime planning, cross-training of staff, use of part-time workers, encouraging clients to undertake self service operations, asking them to share capacity, design capability to be flexible, lease or share common equipment and facilities. The manager may also try to influence demand by instituting off-peak pricing regimes, special offers, additional services and reservation and complementary services (William, 2012).

2.3.1.1 Price Management

Various authors have acknowledged the significance of costs and fee changes in relation to type of market as the basis for building a lasting competitive advantage. Various tools for price management include price discrimination and dynamic pricing (Meissner & Koenig, 2010). According to Tranter et al., (2008) determination of prices remains the core tool of price capacity management. In case of discrimination, customers pay dissimilar accommodation prices hence the financial logic is price variations within the hotel industry. For example, business travelers remain indifferent to high prices compared to clients on holiday vacation. However, in order to limit patrons who opt for products that are inexpensive, pricing conditions are being created that modify certain products in some way (Zhang & Bell, 2010). Such conditions entail the length of stay, day of the week, cancellation, guest type, payment and changing conditions. One of the strategies managers employ for demand shifting from off peak to peak times entails the use of a system of differentiated scheme of pricing, which can also enhance demand for off-peak periods. Cases of such systems are abundant; such include movie prices, family evenings at Ball Park on weekdays, a happy hour at the bars, weekend and night distance fares, top service prices and two-for-one vouchers on Tuesday nights in restaurants (Kimes, 2009).

2.3.1.2 Outsourcing and Creating Reservation Systems

White and James (2006) posit that outsourcing denotes the legitimate connection between an external purchaser and a company in which a purchaser takes over one or several business elements. Johnson (2009) combines outsourcing with subcontracting and indicates that they are important but not key business activities. Johnson (2009) believes that by outsourcing "industry experts", companies can expand the goods and services delivery to clients and enhance their competitiveness.

According to Johnson, (2009) service managers can successfully manage demand by using a reservation scheme that essentially pre-sells the systems production capacity of system of delivering services. If definite times are reserved at a specific facility, executives frequently redirect excessive demand to other times in a similar division or to different divisions in the similar company, greatly reducing time for waiting and providing customer service in some cases. For example, if a chain of motels has a nationwide system of reservation system, an officer can find another motel for a customer along chain which is close to the desired location when the motel of choice is fully occupied. Similarly, airlines are repeatedly capable to divert demand from reserved flights to overcapacity or first-class bus demand, especially if their competitors are out of seat at the required flight time. Booking systems are not without problems, the most important of which are no-shows. Clients usually make booking that they may not use, and in various cases, the customer is not economically accountable for non-compliance with the reservation. Some service companies made sure they did not show up and overcame their capacities and risk annoying customers (Johnson, 2009).

2.3.1.3 Demand Forecasting

Forecasting of demand involved the use of various design techniques to provide plant managers with forecasts of future developments in capacity, demand and supply management metrics. Tranter et al. (2011) posit that excellent use of capacity prediction control requires the ability of the service industry to predict capacity. Forecasting capacity seeks to bring into line capability standards with different demand models. To implement the flexibility of the strategy in terms of working hours, more staff and different facilities are needed in each time frame. This is working best for companies that

deals with products that are putrescible or cannot save their results, such as client processing. When it comes to demand in a given season, it always offers an enhanced gain for the exact employee's level (Alp & Tan, 2010). Jones and Kutsch (2009) observe that this practice requires capacity changes through various methods such as overtime payment during peak hours and fewer off-peak hours, with the staff numbers regulated based on seasonal needs, part time agreements as well as subcontracting.

Jacobs and Chase 2012 posited that forecasting is an approach that predicts sales (demand) for distinct products. However, it is a challenging undertaking and accurate predictions are virtually impossible. Nevertheless, a prudently conducted predictive assessment guarantees better superior quality and assists in capacity planning. Forecasting methods should be improved in all circumstances, as forecasting is crucial in management decisions.

2.4 Supply Strategies

The strategies include part -time employees, sharing capacity and expansion ante. These strategies are used to manage excess influx of customer.

2.4.1 Part-Time Employees

Many of the newly created jobs in the hotel sector are part-time employees (Rosendaal, 2009). All sectors have expressed concerns regarding part-time workers, particularly workers in the retail and services sectors (Hipple, 2009). The Bureau of Labor Statistics (2006) posit that part timing jobs accounts for over 50 per cent of all service jobs. Part-time workers also work in medical centers, production entities and universities (Omar & Shittu, 2016). Flexible planning especially in the hospitality sector, where client demand keeps changing from time to part time recruitment would be recommended as it would lead to costs saving. Worker employed on part time basis receive lower pecks and are not paid other non-cash benefits like health insurance and pension (Shittu & Omar, 2016).

Further, Bureau of Labor Statistics (2010) found that hotels as well as various accommodations offered their new jobs to many newcomers. Hotels also recruit younger people who have narrow skills which can be filled by part timers. The American Hotels and Lodging Association (2012), indicated that the hospitality sector pays 163.3billion

dollars in tourism-related salaries and wages and employs 1.8million people in hotels, with half being part-time employees. The service segment uses part timers to undertake hourly jobs (Hipple, 2009).

Managers also make assumptions that part-time and full-time staffs exhibit similar work behaviour and attitude. They fail to take into account the dissimilarities arising among works on full time basis and part timers in terms of work contentment and work productivity. As a result, most managers use same styles of leadership and philosophies for both individuals. However, a several studies point to dissimilarities amongst worker on full time basis and part timers in their professional behaviours and attitudes (Rosendaal, 2009).

2.4.2 Sharing Capacity

According to Hipple, (2009) in order to provide a service, a company often has to spend on exclusive machinery and manpower which are essential for services provision even when not fully utilized. Thus, a manager in such case may contemplate allotment of capacity to one more company so as to share the prerequisite costly but unused properties. .For instance, a hospitals group in an expansive urban region may decide it is not necessary to buy costly health equipment for each disease and decide capacity sharing with one entity purchasing cardiac machines, obstetric, kidney and other gynecological machineries. Participating physicians would then be given admitting rights in all treatment centers. Through equipment sharing, medical facilities shall not merely make enhanced usage of the costly properties, but also provide better medical care as groups of experienced and trained professionals in each facility. The concept of shared capacity takes several forms in the aviation industry. Various airlines with occasional flights to and from an airfield share boarding gates, equipment for handing baggage, ramps in addition to ground staff. Actually, various domestic air companies that fly on different routes with unlike cyclic requirements exchange planes when the drop in demand coincides with the peak of another (William, 2012).

The gap between demand and supply is a common challenge in most markets. A large airline may overestimate and underestimate its opulent capacity, while a small airline

may have a low-costing tactic and appeal clients who cannot be given their limited seats. It is common practice to address this mismatch issue through exchanging air capacity between competing airlines through code-sharing provisions (Wassmer et al., 2010). Under these agreements, low-cost airlines can borrow excess capacity from extreme airlines. Similarly, in many markets, such as cars, furniture, clothing, computers, footwear, information technology products, sporting goods and toys, capacity sharing among retailers is expanding (Comez et al. 2012). Such a process of sharing competitive capacity can be observed in many other environments (e.g. car parts, car hires, telecommunications, hotels and trucks).

For example, in the maritime market, freight forwarders can buy capacity from each other to better coordinate demand with supply. Another notable example is the creation of an online platform for trading and online matching such hotel-overbooking.com website, where hotels with excessive accommodation can buy rooms in (nearby) inaccessible hotels and their guests can move to them (Li & Zhang, 2015).

2.4.3 Expansion Ante

Rosendaal (2009) posited that astute service executives repeatedly spend in "ante expansion". When it comes to growth, it is sometimes obvious that part of the novel development may have been carried out when the facilities were originally built at a much lower cost and distraction. Thus, careful inquiry in advance would show which elements are included from construction of the facility. For example, for smaller investments, a hotel can construct its kitchenette with extra spacing to serve supplementary guests later. Construction works can direct cable, water and ducts for air conditioning to the building edges where the extension will be undertaken. An executive can stock adequate land for development and other parking needs. Such measures allow restaurant managers to expand capacity without the need to renovate the kitchen, renovate electrical wiring, air conditioning and plumbing, or buying of adjacent property at high costs (Hu et al., 2013).

2.5 Capacity Management and Performance

Bradley and Arntzen (2009) found that by optimizing capacity and production/warehouse selection, companies achieved better financial results. They present their results using the case methodology conducted in an electronic entity. With swift advances in technical innovation and expanding manufacturing machinery costs, numerous OEMs remain unwilling to react to fiscal phases through their internal capacity adjustment. Then; capacity contracts have turn out to be a crucial function of capacity investments selection (Mason et al., 2002).

Capacity is the propensity to handle a prevailing need, resulting in measure that is more dynamic. When capacity is articulated in such a mode, it is clear that it refers to the amount of output from the service delivery system. As a result, capacity contains a time dimension and is affected by all system input elements. Capacity management denotes the capability to balance customer supply and demand as well as facility delivery design capability to meet demand. This emphasizes, first, an understanding of type of demand through forecasts and secondly the ability to oversee capability to address anticipated requirements (Lovelock, 2014).

Managers in charge of operations employs capacity management to reduce the trade-off between quality of their resource and its performance. The performance and the quality of the resources are vital in a strategic setting because they affect the ability of the hotel sector to achieve its value (according to the customer) and prices (Bowman 2009). Capacity management and consumer contentment are focused on perceived benefit for the client, and sustainability while profitability and price is affected by unit costs. Effective sustainability and performance monitoring is designed to raise productivity, detect performance requirements, provide feedback on specific requirements, and support professional advancement (Smith & Millership, 2008).

Companies invest in its human resources to increase productivity and target greater market segments by providing sophisticated services (Appelbaum, Bailey & Berg, 2000). Sector performance is also affected by overall profitability and business progress (Purcell & Hutchison, 2009).

Hochbaum and Atamturk (2001) indicates that the 4-channel pact between productivity, capacity, contracting and supply goes beyond a fixed range. Milner and Kouvelis (2002) focus on 2-phase supply by examining the effects of unpredictability in demand/supply decisions and in the contractual relationship. They documented that greater unpredictability of supply will improve vertical assimilation because OEMs are motivated to invest in creditors to make sure predictable and regular deliveries. Conversely, outsourcing tends to be striking because the unpredictability of demand increases.

Battistoni (2013) conducted a study on SMEs in Italy in which he found that operational management strategies positively impacted company's productivity and it was positively related to production and SCM so as to undertake best practices that have an impact on profits, internal efficiency and cost reduction. Additionally, he documented that the entity size did not play a role in the implementation of operational management procedures.

Oyedijo (2012) also explored the strategic speed and competitiveness of the Nigerian telecommunications industry. The results documented a fundamental link between strategic dexterity and competitiveness. He also found that companies that are flexible and speedy outperform companies with poor tactical agility.

Locally, Kanorio (2014) explored how quality management affected Kenyan banking sector operational performance and documented that quality management systems adoption increases the bank's profitability, turnover, competitiveness, increases the market share, improves services provision, ensures effective detection of operational waste, improves operational efficiency and thus reduce operating costs. In her findings, Wanjiku (2015) established that mobile communications companies and other industrial companies that use operational management strategies post higher performance in their corresponding sectors.

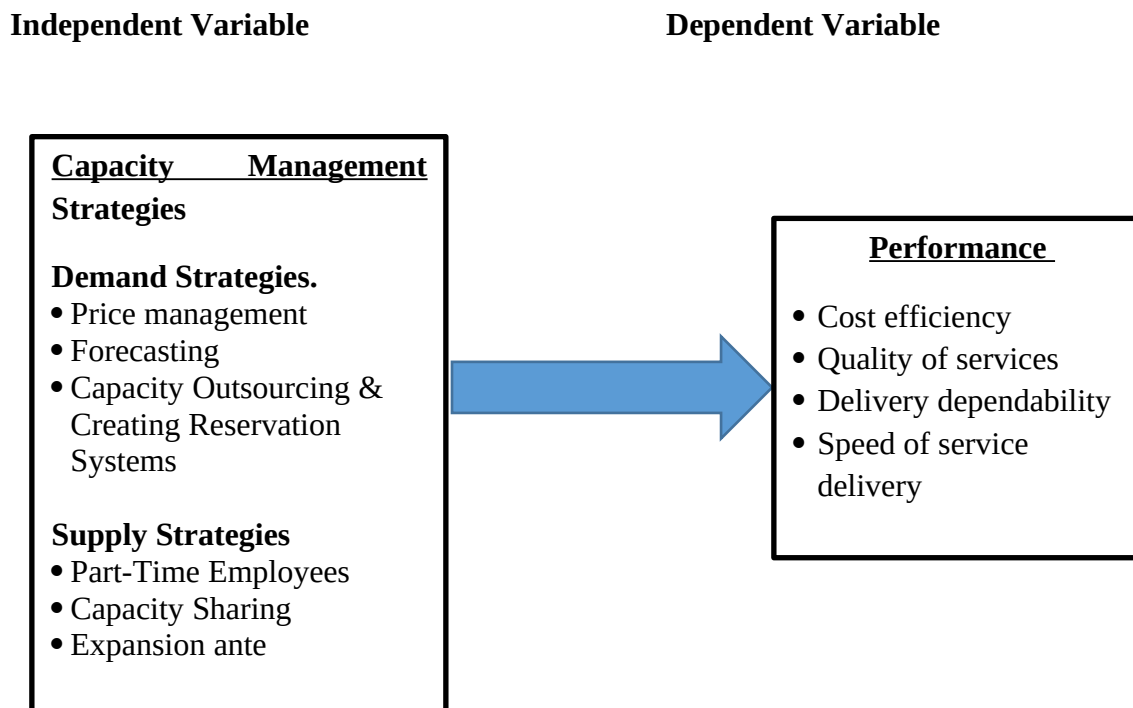
Managers should guarantee that their companies the first in adopting the most effective strategies. Such ensures that their companies and have top products and profitable. Shikuri and Chepkwony (2013) examined the business challenges facing the Kenyan hotel industry and documented that skilled labour shortage was the biggest challenge.

Ongori et al. (2013) explored the determinants Kenyan hotels and restaurants performance and documented identified inter alia gaps in staff skills. The empirical findings documented that capacity management positively affects organizational performance in various contexts. However, few researches have been undertaken on how managing capacity affects company performance. The results were also not convincing. This paper therefore pursues to seal the knowledge gaps by assessing whether capacity management affects five-star hotels performance.

2.6 Conceptual Framework

The conceptual model depicts the linkage between independent variables (capacity management strategies) and a dependent variable that is organizational performance measured by capacity utilization such as cost efficiency, quality of services, delivery dependability and speed of service delivery.

Figure 2.1: Conceptual Framework



Source: Researcher, (2021)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

Rose and Irny (2005) indicate that research methodology is a procedural inquiry that involves theoretically analyzing methods employed to a given study field. The section aims at providing chronology on how the research work was conducted and it included study design, population and sample design, methods of collecting data, procedures, instruments and the analysis of data.

3.2 Research Design

A cross sectional survey was employed and as it enabled the researcher to make available a comprehensive, detailed overview and general assessment of whether capacity management affects performance of five-star hotels located within Nairobi county. A cross sectional strategy has been simplified as a snapshot of the populace for which they gather data. The advantage of a cross sectional survey is that the researcher can compare and compare many variables present in a population in a specific time period, and is therefore essential for the study to gather data to draw conclusions about the population at a given point in time (Churchill, 2011).

3.3 Population of the Study

Mugenda and Mugenda (1999) noted that a population is an assortment of persons, events, or things that share specific and common remarkable traits that a researcher intends to generalize study outcomes. The context of the study involved a census of all the 32 five- star hotels within the County of Nairobi. The population was stratified in to the following; top-level, middle line and lower level management and respondents were picked randomly. The study involved 96 participants drawn from the strata management structures of the respective five- star hotels within the Nairobi County. Stratified sampling was preferred as the target population was not homogeneous and could be divided into strata or groups to attain a sample that was representative. (See Appendix II).

3.4 Data Collection Instruments

Primary data collection was undertaken through a structured questionnaire. The structured questionnaires were issued to individual respondents within the various organizations to gather the required information for the study. The Likert scale is suitable for measuring attitudes, perceptions, behaviors and values which are very useful in transforming qualitative feedbacks to quantitative values (Mugenda & Mugenda, 2003).

3.5 Data Analysis and Presentation

In data analysis, data is organized to lead to results that need to be interpreted by the researcher (Burns & Grove, 2003). As noted by Burns and Grove (2003) and Hynman (2009), data analysis involves converting questionnaire responses into a form that can be manipulated to generate statistics. The filled questionnaires were checked for information consistency and completeness before analysis. The first and second objective of the study were analyzed through inferential statistics which involved regression analysis that produced the Analysis of Variance with the aid of SPSS Mac version 23. Objective three and four of the study were analyzed through descriptive statistics.

The model comprised of 6 variables as the independent variables which included Price management, demand forecasting, Capacity Outsourcing & Creating Reservation Systems, Part-Time Employees, Capacity sharing and Expansion ante as aspects of demand strategies and supply strategies. The dependent variable was performance. The output of the study findings was presented through frequency distributions, tables showing mean scores, standard deviation and percentages for every variable in the study. Other findings were presented through charts and histograms and interpretations were explained.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \varepsilon$$

Where;

Y = Performance

β_0 = Constant Term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ & β_6 = Beta Coefficients

X_1 = Price management

X_2 = Forecasting

X_3 = Capacity Outsourcing & Creating Reservation Systems

X_4 = Part-Time Employees

X_5 = Capacity Sharing

X_6 = Expansion ante

ε = Error Term

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

Chapter four highlights the results and the findings of the study as per the set objectives. It further captures the response rate results, background information results, findings on capacity management strategies and challenges affecting implementation of capacity management strategies and finally interpretation of the findings.

4.2 Response Rate

The research study undertook a census of all 32 five-star hotels within the County of Nairobi where 96 participants were targeted from the hotels management. The study managed to collect complete data from 24 five-star hotels thus a response rate of 76.04%. The attained response rate was deemed adequate to undertake study, as it was more than 50%. This response rate was ascribed to the respondents' cooperation and the researcher's effort to explain the purpose and objectives of the study. Table 4.1 illustrates the results.

Table 4.1: Response Rate

Response	Population	Frequency	Percent
Returned questionnaires	24	72	76.04%
Unreturned questionnaires	8	24	23.96%
Total	32	96	100%

Source: Study Data (2021)

4.3 Background Information

This segment presents findings on the period the participants had worked, the respondents job position, department worked and the adoption of capacity management mechanisms. The results were as follows

4.3.1 Period Worked

The participants were required to specify the period they had worked in the hotel industry. Table 4.2 shows the outcomes.

Table 4.2: Period Worked

Years	Frequency	Percent
0 – 2 Years	5	6.8
3 – 5 Years	24	32.9
6 – 10 Years	27	37.0
Above 10 years	17	23.3
Total	73	100.0

Source: Study Data (2021)

Table 4.2 shows that 37% of the participants had worked for 6 to 10 years while 32.9% had worked for 3-5 years respectively. Further, 23.3% had worked for more than 10 years while 6.8% had worked for less than 2 years. The results on average shows that majority of the participants had worked for more than 3 years, which implies they had adequate experience, and they understood the operations of the hotel industry.

4.3.2 Respondents Job Position

The section sought to determine the respondents job positions in the sampled hotels. Figure 4.1 documents the results

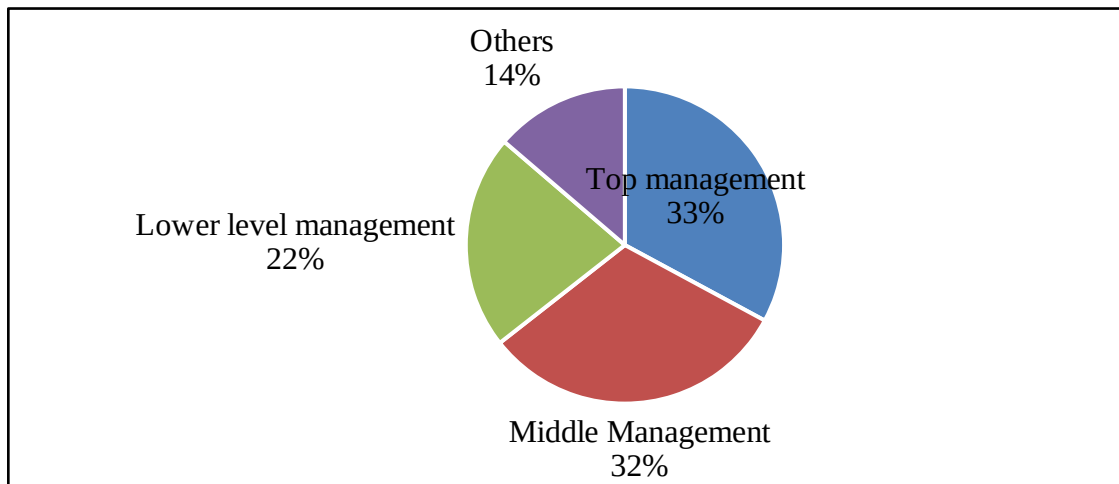


Figure 4.1: Respondents Job Position

Source: Study Data (2021)

The findings on figure 4.1 display that 33% of the participants were in the top management whilst 31% were in the middle management correspondingly. Additionally, 22% were in the lower category of management while 14% were in the other categories, which included supervisors, operation officers and customer relationship officers. The results thus indicate most of the respondents were at the management level which implies that respondents understood the operations and activities of the hotel industry.

4.3.3 Department Worked

The participants were required to highlight the various departments in which they served as tabulated below

Table 4.3: Department Worked

Department	Frequency	%
Human Resource	9	12.3
Sales and Marketing	7	9.6
Room operation	12	16.4
Operations	45	61.6
Total	73	100.0

Source: Study Data (2021)

Table 4.3 shows that 61.6% of the respondents were from the operations department while 16.4%, 12.3% and 9.6% were from room operations, human resources, sales and marketing respectively. This outcome therefore shows that majority of the participants were in the operations department.

4.3.4 Extent of Adoption of Capacity Management Strategies

The respondents were required to indicate whether their hotel had capacity management Strategies. Figure 4.2 shows the results

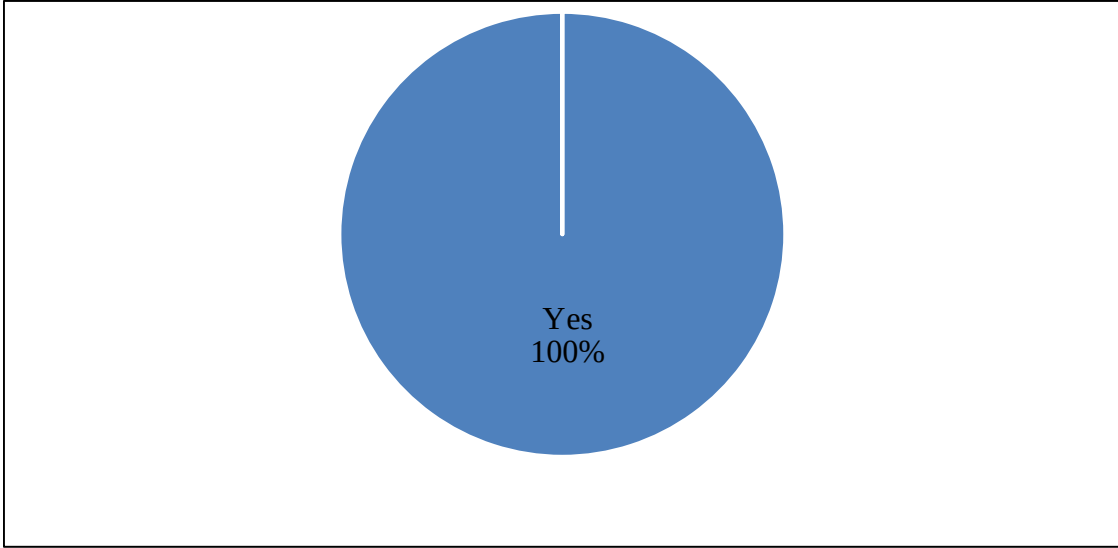


Figure 4.2: Extent of Adoption of Capacity Management Strategies

Source: Study Data (2021)

Figure 4.2 shows that all the five- star hotels had adopted of capacity management strategies thus a 100% response rate. This analysis implies that capacity management mechanisms have been widely adopted in the Kenyan hotel industry.

4.4 Capacity Management Strategies

The section indicates the findings on demand and supply management strategies that had been embraced by the five-star hotels within Nairobi County.

4.4.1 Demand Strategies

The section shows the findings the demand strategies which the Five-star Hotels had adopted. Table 4.4 displays the outcomes

Table 4.4: Demand Strategies

Statement	Mean	Std. Deviation
Demand forecasting facilitates accurate demand forecasting which enables the management to plan for in terms of bed capacity, food, drinks and sales estimates	3.97	.745
Capacity outsourcing and reservation systems enhance communication between the clients and the hotels where customers are able to book for facilities by themselves hence ensuring proper demand management	4.03	.645
Composite mean and standard deviation	4.14	.670
Price management is a factor in demand management as it helps to ensure maximum occupancy of bed capacity	4.41	.620

Source: Study Data (2021)

Table 4.4 depicts that price management as a factor in demand management which ensures maximum occupancy of bed capacity was adopted to large extent (mean=4.41; SD=0.620) respectively. Additionally, demand forecasting which facilitates accurate demand forecasting and enables the management to plan for in terms of bed capacity, food, drinks and sales estimates was moderately adopted by the five- star hotels (mean=3.97; SD=0.745). Further, capacity outsourcing and reservation systems which enhance communication between the clients and the hotels where customers are able to book for facilities by themselves thus ensuring proper demand management was adopted to a large extent (mean=4.03; SD=0.645). The overall mean indicates that the five-star hotels had embraced demand approach mechanisms to a great extent (mean 4.14, SD=0.670) respectively. The above results imply that the five- star hotels in Nairobi County had largely adopted price management, demand forecasting and outsourcing and reservation systems as they key demand strategies.

The study documented that price management had a positive (B=0.104) and significant (P-value=0.012<0.05) interrelationship with performance. This finding indicates that a unit increase in prices increases performance of the five-star by 0.104 units thus price

management significantly and positively affects the five-star hotels performance. According to Tranter et al., (2008) determination of prices remains the core tool of price capacity management. In case of discrimination, customers pay dissimilar accommodation prices hence the financial logic is price variations within the hotel industry.

Secondly, the study found that demand forecasting had a positive ($B=0.687$) and significant ($P\text{-value}=0.025<0.05$) interrelationship with performance. The finding thus implies thus increase in demand forecasting increases performance of the five- star hotels by 0.687 units thus demand forecasting positively and significantly affects the five-star performance. Johnson, (2009) posit that service managers can successfully manage demand by using a reservation scheme that essentially pre-sells the systems production capacity of system of delivering services.

Additionally, the study results revealed that outsourcing and creating reservation systems had a significant ($P\text{-value}=0.000<0.05$) and positive ($B=0.521$) link with performance. The finding therefore implies thus use of outsourcing and creating reservation systems increases performance of the five-star hotels by 0.521 units thus outsourcing and creating reservation systems significantly and positively affects the five-star hotels performance. As such, Tranter et al. (2011) posit that excellent use of capacity prediction control requires the ability of the service industry to predict capacity. Forecasting capacity seeks to bring into line capability standards with different demand models.

4.4.2 Supply Strategies

The section shows the findings on the supply strategies which the Five-star Hotels had adopted. Table 4.5 depicts the findings.

Table 4.5: Supply Strategies

Statement	Mean	Std. Deviation
When there is persistent influx of clients most hotel invest in the expansion ante to cater for the growth	3.59	.597
Composite mean and standard deviation	4.04	.697
The service segment uses part timers to undertake hourly jobs	4.22	.731
During peak hours or seasons your hotel embraces capacity sharing model	4.32	.762

Source: Study Data (2021)

Table 4.5 depicts that the service segment used part timers to undertake hourly jobs to a large extent (mean=4.22; SD=0.731) and during peak hours or seasons the five- star hotels embraced capacity sharing model (mean=4.32; SD =0.762) respectively. Further, the results indicated that when there is persistent influx of clients most five- star hotels moderately invest in the expansion ante to cater for the growth (mean=3.59; SD=0.597) respectively. The overall mean indicates that the five-star hotels had embraced supply approach mechanisms to a great extent (mean =4.04, SD=0.697) respectively. This outcome indicates that the five- star hotels had largely adopted the use of part time employees, capacity sharing and expansion ante as they key supply strategies.

Further, the study results indicate that the use of part time employees had an insignificant (P-value=0.376<0.05) and positive (B=0.056) interrelationship with performance. This means that the increase use of part time employee does not have a statistically significant impact the performance of the five-star hotels. Shittu and Omar (2016) indicates that flexible planning especially in the hospitality sector, where client demand keeps changing from time to part time recruitment would be recommended as it would lead to costs saving. Worker employed on part time basis receive lower pecks and are not paid other non-cash benefits like health insurance and pension.

The study also found that capacity sharing had a positive (B=0.172) and significant (P-value=0.017<0.05) effect on performance. This finding indicates that capacity sharing increases the performance of five-star hotels by 0.172 units thus capacity sharing

significantly and positively affects the five-star hotels performance. According to Hipple, (2009) in order to provide a service, a company often has to spend on exclusive machinery and manpower which are essential for services provision even when not fully utilized. Thus, a manager in such case may contemplate allotment of capacity to one more company so as to share the prerequisite costly but unused properties.

Lastly, the study documented that expansion ante had an insignificant (P-value=0.118>0.05) and positive (B=0.114) interrelationship with the performance. This means that the increase expansion ante strategy does not have a statistically significant impact the performance of five-star hotels. Rosendaal (2009) posits that astute service executives repeatedly spend in "ante expansion". When it comes to growth, it is sometimes obvious that part of the novel development may have been carried out when the facilities were originally built at a much lower cost and distraction.

4.5 Challenges affecting Implementation of Demand and Supply Strategies

This section sought to establish the challenges affecting the execution of demand and supply strategies among the various five- star hotels in Nairobi County. Table 4.6 depicts the findings

Table 4.6: Challenges affecting Implementation of Demand and Supply Strategies

Statement	Mean	Std. Deviation
Information technology infrastructure requires a lot of training among the staff	3.74	.667
Inadequate security within the borders pose a great challenge in hotel industry	3.99	.736
Composite mean and standard deviation	4.09	.695
Complexity of customer preference becomes a challenge when dealing with large customer base	4.10	.730
Customer complaints have been reported on occasional basis	4.19	.591
Demand for hotels goes with seasons and hence accurate demand forecasting becomes a challenge	4.22	.712
High cost of operation in running the hotels provides little room for price discrimination hence low volume of sales	4.29	.736

Source: Study Data (2021)

The results on table 4.6 indicate that information technology infrastructure moderately requires a lot of training among the staff (mean=3.74; SD=0.667) whereas high cost of operation in running the hotels largely provides little room for price discrimination leading to low sales volume (mean=4.29; SD=0.736) respectively. The results further showed that demand for hotels largely goes with seasons hence accurate demand forecasting becomes a challenge (mean=4.22; SD=0.712) whereas inadequate security within the borders pose a large challenge to hotel industry (mean=3.99; SD=0.736) respectively. Further, the results indicated that customer complaints are largely reported on occasional basis (mean=4.19; SD=0.591) whilst complexity of customer preference largely becomes a challenge when dealing with a large customer base (SD=4.10, SD=0.730) respectively. The overall mean indicates that the implementation of demand and supply strategies by five- star hotels is affected by various challenge among them information technology infrastructure, high costs of operations, seasonality based demand, inadequate security within the borders, recording of increased customer complaints, and complexity of customer preferences especially when dealing with a large customer base to a great extent.

4.6 Performance

The section shows outcomes on the level to which various dimensions of performance of the hotels had improved due to adoption of capacity management strategies. The results were as follows

Table 4.7: Performance

Measure	Mean	Std. Deviation
Delivery dependability	3.78	.768
Cost reduction	4.01	.666
Composite mean and standard deviation	4.06	.707
Speed of service delivery	4.12	.744
Quality of services	4.34	.650

Source: Study Data (2021)

Table 4.8 depicts that adoption of capacity management strategies led to reduction of cots in the five- star hotels to a large extent (mean=4.01; SD=0.66) while the quality of services in the five- star hotels improved to a large extent (mean=4.34; SD=0.650) respectively. However, delivery dependability improved at a moderate extent (mean=3.78; SD=0.768) whereas speed of delivery improved at large extent (mean=4.12; 0.744) respectively. The overall mean of 4.06 (SD=0.707) indicates that that adoption of capacity management strategies improved the five-star hotels performance to a large extent.

4.7 Relationship between Capacity Management Strategies and Performance of the Five-Star Hotels

Regression analysis were used to determine the interrelationship between capacity management strategies and the five-star hotels performance. The results were as follows.

4.7.1 Model Summary

Table 4.8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.884 ^a	.782	.762	.25461

a. Predictors: (Constant), Expansion ante, Demand forecasting, Price management, Part-time employees, Capacity sharing, Outsourcing and creating reservation systems

Source: Study Data (2021)

Table 4.8 depicts that the R square (coefficient of determination) was 0.782, which shows that the explanatory variables (expansion ante, demand forecasting, price management, part-time employees, capacity sharing, outsourcing and creating reservation systems) accounted for 78.2% of the variation in the response variable (performance). The other proportion (21.8%) is accounted for by other variables and the error term.

4.7.2 ANOVA

Table 4.9: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.366	6	2.561	39.505	.000 ^b
	Residual	4.279	66	.065		
	Total	19.644	72			

a. Dependent Variable: Performance

b. Predictors (Constant), Expansion ante, Demand forecasting , Price management, Part-time employees, Capacity sharing, Outsourcing and creating reservation systems

Source: Study Data (2021)

Table 4.9 depicts that that the adopted regression model was significant as indicated by an F value of 39.505 which is statically significant as depicted by a P-value of $0.000 < 0.05$. This shows that the model was appropriate to examine the interrelationship among the study variables.

4.7.3 Coefficients

Table 4.10: Coefficients

Model	Unstandardized		Standardized	t	Sig.	
	Coefficients		Coefficients			
	B	Std. Error	Beta			
1	(Constant)	.873	.444		1.965	.054
	Price management	.104	.040	.182	2.576	.012
	Demand forecasting	.687	.299	.140	2.293	.025
	Outsourcing and creating reservation systems	.521	.053	.755	9.767	.000
	Part-time employees	.056	.063	.070	.892	.376
	Capacity sharing	.172	.070	.180	2.437	.017
	Expansion ante	.114	.072	.146	1.585	.118

a. Dependent Variable: Performance

Source: Study Data (2021)

The coefficients result show that price management had a positive (B=0.104) and significant (P-value=0.012<0.05) interrelationship with performance while demand forecasting had a positive (B=0.687) and significant (P-value=0.025<0.05) interrelationship with performance. The results further show that the link between outsourcing and creating reservation systems and performance was positive (B=0.521) and significant (P-value=0.000<0.05) while there was a positive (B=0.056) but insignificant (P-value=0.376<0.05) link between the use of part-time employees and performance. Capacity sharing positively (B=0.172) and significantly (P-value=0.017<0.05) affected performance whilst expansion ante positively (B=0.114) and insignificantly (P value=0.118>0.05) affected the performance of the five-star hotels within Nairobi County. From the findings the following model was formulated.

$$Y = 0.873 + 0.104X_1 + 0.687X_2 + 0.521X_3 + 0.056X_4 + 0.172X_5 + 0.114X_6 + \epsilon$$

Where

Y = Performance

X₁ = Price management

X₂ = Demand forecasting

X₃ = Outsourcing and creating reservation systems

X₄ = Part Time employees

X₅ = Capacity sharing

X₆ = Expansion Ante

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the research findings, conclusions and recommendations. The chapter also outlines the research limitations and suggestions for further investigation.

5.2 Summary of Findings

This study aimed at establishing the influence of capacity management strategies on the five-star hotels performance in Nairobi County. The study also sought to evaluate the challenges experienced in the implementation of capacity management strategies by the five-star hotels. The study undertook a census of all the 32 hotels within the County of Nairobi. The study involved a sample of 96 participants drawn from the strata management structures of the respective five- star hotels within the Nairobi County. Primary data collected through questionnaires distributed to the hotel managers. The study employed descriptive statistical tools and the regression model for data analysis. The study managed to collect complete data from 24 respondents (five-star hotels) thus 76.04% response rate which was adequate for the study.

An in-depth descriptive analysis on extent of adoption of demand strategies revealed that five-star hotels had largely adopted price management, demand forecasting and outsourcing and reservation systems as they key demand strategies. The results also revealed that the five-star hotels had largely adopted the use of part time employees, capacity sharing and expansion ante as the key supply strategies.

Thirdly, descriptive analysis statistics on the challenges affecting implementation of demand and supply strategies revealed that the implementation of demand and supply strategies by the five- star hotels was largely affected by various challenge among them information technology infrastructure, high costs of operations, seasonality based demand and inadequate security within the borders. Other challenges included increased customer complaints, and complexity of customer preferences especially when dealing with a large customer base.

The regression results showed that price management, demand forecasting and had positive and significant relationship and further results demonstrated that relationship between outsourcing, capacity sharing and creating reservation systems was positive and significant. Further, a positive but insignificant interrelationship was documented between the use of part-time employees and performance whilst expansion ante revealed there is positive and insignificant relationship with the performance of the five- star hotels.

5.3 Conclusions

The study's first objective was to examine whether demand strategies affect the performance of five-star hotels within Nairobi County. The findings indicated that price management, demand forecasting, outsourcing and creating reservation systems positively and significantly affected the five- star hotels performance. The study based on this observation concludes that price management, demand forecasting, outsourcing and creating reservation systems are the demand strategies that influence the performance of five-star hotels within Nairobi County.

The study's second objective was to examine whether supply strategies affect the performance of five-star hotels within Nairobi County. The study outcomes indicated that only capacity sharing had a significant and positive impact on the five-star hotels performance. The study thus concludes that capacity sharing is the only supply approach mechanisms that affects performance of five-star hotels within Nairobi County.

Thirdly, this study sought to assess the challenges experienced in the implementation of capacity management strategies among 5-star hotels within Nairobi County. The research based on documented findings concludes that high costs of operations, seasonality based demand and inadequate security within the borders and increased customer complaints are the major challenges affecting the implementation of capacity management strategies among 5-star hotels within Nairobi County.

5.4 Recommendations

The study indicated that price management, demand forecasting, outsourcing and creating reservation systems were the demand strategies that affected performance while capacity

sharing was the supply strategies that affect the five-star hotels performance. The study based on these findings suggests that the management of five- star hotels in Nairobi should develop effective policies on both demand and supply approach mechanisms and incorporate price management, demand forecasting, outsourcing and creating reservation systems and capacity sharing to enhance their hotels performance.

Secondly, it was documented that various implementation of demand and supply strategies by five- star hotels was affected by various challenge among them information technology infrastructure, high costs of operations and seasonality based demand. The study thus recommends that the management as well as the various policy makers in the hotel industry should develop effective strategic as well as policy mechanisms to address the various firm specific and environment related challenges affecting the Kenyan hotel industry.

5.5 Limitation of the Study

The study's context was five-star hotels within Nairobi hence the research findings are only applicable to the sampled hotels and may not be applied to five- star hotels in other towns in Kenya. This study collected primary data using questionnaires from middle, lower and top-levels of management from hence they study did not seek the views of all employees in the five-star hotels.

In addition, this study sampled the 96 respondents upon which only 73 participants responded to the issued questionnaire. The study thus failed to attain a 100% response rate. Hence, the findings were based on the 73 participants who responded to the study questionnaires. Further, some of the respondents were reluctant to respondent to the questionnaires and thought it was some form of an investigation by authorities. The researcher however explained the study's purpose and assured the participants that the intent of obtaining information was for purely academic purposes and assured that their confidentiality was going to be upheld.

The study used primary data which was collected via questionnaires which were structured. The study therefore failed to incorporate the participants qualitative views which can be obtained through unstructured questionnaires as well as interview guides

which provide an opportunity for the participants to openly express their views. In addition, the study was undertaken among five star hotel within Kenya therefore replicating the results in similar hotels in other countries might not be possible.

5.6 Suggestions for Further Research

This study was undertaken in Nairobi County but there are many other five- star hotels in major town towns and counties within Kenya. The study therefore recommends an extra research on effect of capacity enhancement mechanisms among five- star hotels in other parts of the country. In addition, a similar research can be undertaken on the effect of capacity enhancement mechanisms on competitiveness of five-star hotels.

Secondly, the study focused on cost reduction, quality of services, delivery dependability and speed of service delivery as the key performance measures. However, several other financial and non-financial measure like return on assets and equity, the balanced score card are also available performance measures. The study thus recommends a similar study using other performance measures.

Lastly, the study's model summary indicates that expansion ante, demand forecasting, price management, part-time employees, capacity sharing, outsourcing and creating reservation systems explained 78.2% of the variation in the five- star hotels performance. This indicates several other determinants affect five- star hotels performance. The study recommends a study on other factor both firm specific and industry related that might affect capacity management as well the hotels performance.

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APPENDICES

Appendix I: Research Questionnaire

Introduction

The tool was developed for academic purposes only. Aim is to collect data on the impact of the capacity management strategies on the performance of five-star hotels within Nairobi County. Kindly note that the data you provide will be treated with a lot of confidentiality and privacy. Thank you for your consideration.

PART 1: General Information

Kindly tick (√) where appropriate

1. For how long have you worked in the hotel industry?
 - 0 – 2 Years ()
 - 3 – 5 Years ()
 - 6 – 10 Years ()
 - Above 10 years ()
2. Positions Held
 - () Top management () Middle Management () Lower Level Management
 - () Others please specify
3. Department Worked in
 - Human Resource () Sales and Marketing () Room Operations () Operations ()
4. Does your hotel have capacity management mechanism to ensure your demand and supply match? Yes () No ()

Part II: Capacity Management Strategies

Section A: Demand Strategies

5. Kindly indicate extent to which demand strategies have been adopted among five- star hotels in Nairobi County. Using a Likert Scaled of 1 – 5 where: -1 = No Extent, 2 = Small Extent, 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

S/No.	Demand Strategies	1	2	3	4	5
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1	Price management is a factor in demand management as it helps to ensure maximum occupancy of bed capacity					
2	Demand forecasting facilitates accurate demand forecasting which enables the management to plan for in terms of bed capacity, food, drinks and sales estimates.					
3	Capacity outsourcing and reservation systems enhance communication between the clients and the hotels where customers are able to book for facilities by themselves hence ensuring proper demand management.					

Section B: Supply Strategies

6. Kindly indicate extent to which supply strategies have been adopted among five- star hotels in Nairobi County. Using a Likert Scaled of 1 – 5 where: -1 = No Extent, 2 = Small Extent, 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

S/No.	Supply Strategies	1	2	3	4	5
1	The service segment uses part timers to undertake hourly jobs					
2	During peak hours or seasons your hotel embraces capacity sharing model.					
3	When there is persistent influx of clients most hotel invest in the expansion ante to cater for the growth					

Part III: Challenges Facing the Implementation of Demand and Supply Strategies

7. To what extent has, the following challenges experienced in the implementation of demand and supply strategies among five- star hotels in Nairobi County. Please tick where appropriate on a scale of 1 – 5 where: 1 = No Extent, 2 = Small Extent, 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

S/No.	Challenges	1	2	3	4	5
1	Information technology infrastructure requires a lot of training among the staff					
2	High cost of operation in running the hotels provides little room for price discrimination hence low volume of sales					
3	Demand for hotels goes with seasons and hence accurate demand forecasting becomes a challenge.					
4	Inadequate security within the borders pose a great challenge in hotel industry.					
5	Customer complaints have been reported on occasional basis					
6	Complexity of customer preference becomes a challenge when dealing with large customer base.					

Part V: Performance

8. Please indicate the extent to which the following dimensions of performance have improved your organization for the last two years due to adoption of capacity management strategies. Use the following scale where appropriate: 1 = No Extent, 2 = Small Extent, 3 = Moderate Extent; 4 = Large Extent; 5 = Very Large Extent

Statement	1	2	3	4	5
a) Cost efficiency					
b) Quality of services					
c) Delivery dependability					
d) Speed of service delivery					

Appendix II: List of Five- star Hotels in Nairobi County

- 1) Mara Safari Club
- 2) Mpata Safari Club
- 3) Sarova Mara Game Camp
- 4) Windsor Golf Hotel and Country Club
- 5) The Giraffe Manor, Acacia Tree Lodge
- 6) The Heron Portico
- 7) Ibis Styles Nairobi Westlands
- 8) Eka Hotel Nairobi
- 9) Double Tree by Hilton
- 10) Nairobi Hurlingham
- 11) The Fairmont Norfolk Hotel
- 12) Southern Sun Mayfair Nairobi
- 13) Sarova Stanley Hotel
- 14) Sankara Hotel
- 15) Nairobi Safari Club Hotel
- 16) Laico Regency Hotel former Grand Regency
- 17) Best Western Plus Meridian Hotel
- 18) Best Western Plus Meridian Hotel
- 19) Windsor Golf Hotel and Country Club
- 20) Villa Rosa Kempinski Nairobi
- 21) Radisson Blu Hotel
- 22) Nairobi Upper Hill
- 23) Palacina Residence & Suites
- 24) The Boma Nairobi
- 25) DusitD2Nairobi
- 26) Inter-Continental Nairobi
- 27) Tribe Hotel
- 28) Safari Park Hotel and Casin
- 29) Panari Hotel
- 30) Ole Sereni Nairobi
- 31) Crown plaza Kenya
- 32) Serena Hotel

Source: (Tourism Regulatory Authority, 2020).